

Appendix I

Interim Comprehensive Conservation Plan

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Interim Comprehensive Conservation Plan

I. Introduction

This Interim Comprehensive Conservation Plan for the proposed Little Darby National Wildlife Refuge (Refuge) presents a general framework for how a new national wildlife refuge could be operated and managed if it is eventually developed by the Service. As a conceptual plan, it is not intended to provide extensive detail or pinpoint exactly where facilities would be located, nor is it intended to show where or what public use would be allowed on potential refuge lands. However, it does provide a general discussion of the management actions that would help the Service and its partners meet the biological needs relative to Service trust resources within the Little Darby Creek and Big Darby Creek watersheds (Basin). These trust resources include responsibilities for:

- migratory birds
- endangered species
- interjurisdictional fish
- lands administered by the Service

This Interim Comprehensive Conservation Plan will also answer some of the questions commonly posed by the public during the planning process for new national wildlife refuges. This plan assumes that the preferred alternative discussed in the Environmental Impact Statement for the proposed Little Darby National Wildlife Refuge (Alternative 2) is adopted.

1. Purpose and Scope of the Little Darby National Wildlife Refuge

The purpose of the Refuge would be “for the development, advancement, management, conservation, and protection of fish and wildlife resources” (Fish and Wildlife Act of 1956).

II. Interim Refuge Goals and Objectives

The Service uses the goals of the National Wildlife Refuge System (NWRS) as a guide to developing management objectives for individual refuges. To promote consistency, the Service has established a standard procedure for setting management objectives based on the priority ranking of potential uses. The ranking defines the types of activities and programs that are most appropriate on Service lands and guides the general order in which those activities and programs may be provided through management.

According to this priority system, management objectives are developed in a nested fashion, beginning with higher priority uses and proceeding in stages to lower priority uses. The intent is not to limit the potential for lower priority activities and programs, but rather to ensure that their management does not

conflict with higher priority program objectives. Some flexibility among priorities and corresponding management objectives is possible, but the degree of flexibility depends on the lands in question. This proposal is unique, however, in that it has a two tiered acquisition boundary consisting of:

- a core area for voluntary fee simple acquisition and;
- a farmland preservation boundary for priority land protection. The farmland preservation boundary will focus on less than fee simple acquisition activities.

Because the boundary structure is unique, the priority regimen will vary according to the need and importance of protecting water quality as well as specific Federal trust resource emphasis, such as migratory birds.

Goals of the National Wildlife Refuge System

The goals established for the National Wildlife Refuge System are as follows:

- To preserve, restore, and enhance in their natural ecosystems (when practicable) all species of animals and plants that are endangered or threatened with becoming endangered;
- To perpetuate the migratory bird resource
- To preserve a natural diversity and abundance of fauna and flora on refuge lands; and
- To provide an understanding and appreciation of fish and wildlife ecology and the role human beings play in the environment. This goal includes providing refuge visitors with high-quality, safe, wholesome and enjoyable recreational experiences oriented toward wildlife to the extent that these activities are compatible with the purposes for which the refuge was established.

To clearly identify priorities, the Service groups activities and programs that are appropriate on wildlife refuges into four management categories: resource preservation, resource management, public use and non-wildlife.

The resource preservation category includes endangered species management, protection of threatened communities and cultural resources, and establishment of dedicated areas such as Wilderness Areas. The resource management category includes maintenance and production of migratory birds and other wildlife. Public use, which includes scientific study and environmental education and interpretation, encompasses various wildlife/wildlands oriented activities such as hunting, fishing and wildlife observation. The non-wildlife category includes nonconforming activities that likely will be present in the administration of the project. This includes utility rights-of-way and management of minerals, oil and gas. As part of this proposal, the identification of a Farmland Preservation Area may support two of the four priorities depending upon land use conditions and demographics during the course of the project.

Refuge Goals, Objectives and Community Commitment

Community Commitment

Within the framework of Service mandates and the following refuge goals and objectives, the Service will commit to work with the townships within the project area to develop a Memorandum of Understanding laying out a process to keep the townships informed of and involved in major and relevant policy and management changes (Appendix I-1). This Memorandum of Understanding will be incorporated into the Comprehensive Conservation Plan that the Service will develop if the refuge is established.

The refuge would serve as a vehicle for the restoration, preservation and enhancement of grassland-dependent and wetland-dependent species of fish and wildlife, with emphasis on the Service's trust resources. Establishment of a national wildlife refuge would also enhance biodiversity within the Basin. The following refuge goals and objectives were developed in a detailed planning effort that included public involvement.

Goal 1: Long-term preservation and restoration of Federal threatened and endangered species in the Little Darby Creek watershed.

- Avoid Federal listing of species by promoting and implementing habitat protection and restoration efforts aimed at Federal species of management concern.
- Maintain and improve watershed management practices and aquatic habitat in the watershed that sustain and perpetuate threatened and endangered species.
- Stabilize or increase federally listed threatened and endangered species currently found in the watershed.

Goal 2: Long-term preservation and restoration of migratory birds and their habitat in Little Darby Creek watershed.

- Restore native prairie grasslands that are characteristic of this eastern-most extension of the continental tallgrass prairie formation. Restore enough prairie grasslands to support grassland-dependent migratory birds that are native to the study area.
- Restore and permanently protect palustrine wetlands and that have been eliminated or degraded by drainage or other land use practices to benefit wetland-associated migratory birds.
- Avoid possible Federal listing of species by promoting and implementing habitat protection and restoration efforts aimed at Federal species of management concern.
- Restore and permanently protect native riparian habitat communities and riverine wetlands that have been eliminated or degraded by drainage or other land use practices.

Goal 3: Provide opportunities for wildlife-dependent public uses consistent with the refuge's natural resource preservation and restoration goals.

- Where compatible with the purposes of the refuge and with the mission of the Refuge System, provide opportunities for hunting, fishing, wildlife observation, wildlife photography, environmental interpretation and environmental education activities.
- Increase people's understanding and awareness of the natural resources of the Little Darby Creek watershed and provide an opportunity to the public to participate in its restoration and stewardship.
- Promote greater public understanding of the relationship between agriculture and other land uses to the natural resources of the Little Darby Creek watershed.

Goal 4: Ensure that the overall watershed biodiversity and Federal wildlife trust resources are protected and enhanced, while respecting agriculture as an existing desirable land use.

- Promote active partnerships that complement resource preservation and restoration efforts by the Service and other groups within the Little Darby Creek Watershed.
- Promote the voluntary participation by a majority of agricultural landowners and operators within the study area in employing practices that preserve or improve water quality and that complement the habitat preservation and restoration efforts by the Service and other organizations.
- Preserve agricultural land as a desirable, priority land use to mitigate the impacts of urban sprawl adjacent to preserved or restored native habitats and the core refuge area.

A. Management Categories and Conceptual Direction

1. Resource Preservation

The following objectives outline outcomes of refuge management that may be desirable for the proposed Little Darby National Wildlife Refuge. If a refuge is approved, additional detailed plan development (with public involvement) would be accomplished to guide refuge management activities.

Threatened and Endangered Species Management

- Encourage increased use (migration, wintering, nesting) of the Little Darby Creek corridor by eagles and osprey.
- Protect existing Indiana bat habitat and design management plans to restore/enhance additional riparian habitat. Establish a population monitoring program to track population status.
- Protect existing Clubshell and Northern riffleshell habitat, and incorporate habitat protection features for these species in detailed project planning. Establish a population monitoring program to assess population status.

- Conduct surveys of suitable habitat to determine the presence of threatened or endangered species.
- Ensure protection of state-listed species and restore habitat for their maintenance.

Cultural Resource Management

- Incorporate historic and archeological features of the area into public interpretive program displays.
- Work cooperatively with other agencies, historic associations and interested individuals to protect and interpret significant area landmarks and archeological sites.

2. Resource Management

Waterfowl Management

- Manage bottomland habitat to increase waterfowl use and production.
- Develop dependable, high-quality migration and wintering habitat capable of supporting endemic waterfowl species. Restore/manage palustrine emergent wetlands.
- Use tools such as hunting and habitat manipulation to reduce the likelihood of waterfowl, particularly local Canada geese, causing depredation problems on neighboring farmland.

Other Migratory Bird Management

- Large populations of other migratory birds reside or are transient in the Basin. Water birds, wading birds, shorebirds, raptors and passerines all are present and will be considered in management. Interim objectives include:
- Restore and maintain stable breeding populations of all migratory birds within the Basin, but particularly for high-priority, grassland-dependent nongame songbirds.
- Restore bottomland and riparian forest and other ecosystems to increase the area's carrying capacity for many Neotropical songbirds and woodland raptors.
- Develop and manage wetlands to benefit migrating shore and wading birds. Restore and preserve large blocks of grasslands for the benefit of grassland dependent migratory birds.

Watershed Conservation Priorities

- Conservation easements within the Watershed Conservation Area will be generally prioritized to achieve the following results: 1) water quality enhancement and in-stream aquatic ecosystem protection and restoration; and 2) migratory bird habitat restoration.

Resident Wildlife Management

- Include in refuge management plans measures to benefit resident wildlife species and maintain population levels sufficient to permit consumptive and non-consumptive uses (as appropriate) by Refuge visitors.

Pest Control Management

- Coordinate vertebrate pest control activities with the Department of Agriculture, Animal/Plant Health Inspection Service, Animal Damage Control Division.
- Actively control beaver on Service land causing unacceptable damage to adjoining private property or bottomland forest.
- Promptly remove any trespass domestic animal found at large on the refuge property, including livestock, dogs and cats.
- Actively treat pest weed species through use of properly registered and approved herbicides or mechanical control with an emphasis on integrated pest management and according to the regional weed control policy.

Trapping Management

- Minimize damage to dikes and/or water control structures and prevent flooding to adjoining private lands.
- Maintain an optimum ratio of open water and emergent vegetation.
- Prevent unacceptable loss of bottomland timber resources.
- Prevent excessive predation on Federal trust species.
- Minimize the incidence of wildlife disease and maintain healthy populations of furbearers.

Fishery / Aquatic Resource Management

- Provide additional recreational fishing opportunities on suitable upland wetlands and, if possible, on the Little Darby Creek with minimal impacts.
- Monitor fish populations and water quality.

Marsh and Water Management

- Protect, restore and manage wetlands.
- Restore and protect bottomland forests, in-stream aquatic resources, and other wetland ecosystems.
- Work cooperatively with the Soil and Water Conservation Districts and Drainage Authorities to facilitate maintenance of existing drainage features for the mutual benefit of all parties.
- Seek citizen input in development of a water management plan.

Grassland Management

- Restore and manage native grasses to increase habitat diversity for resident wildlife and provide nesting habitat for grassland-dependent migratory birds.

Cropland Management

- Establish warm season (prairie) grasses to increase habitat diversity for resident wildlife
- Re-establish riparian/bottomland forests.
- Restore wetlands. Maintain desirable wetland vegetation by mechanical and non-mechanical methods.
- Possibly maintain a cooperative farming program on acquired croplands until the land base and funding are adequate to permit restoration, seeding or wetland restoration.

3. Public Use Opportunities and Management

Six wildlife-dependent recreational public uses have been identified as the priority public uses of the National Wildlife Refuge System and are permitted on most of the national wildlife refuge lands owned by the Service. These uses include:

- fishing
- hunting
- wildlife observation
- wildlife photography
- environmental education
- environmental interpretation

These uses are directly related to the mission of the National Wildlife Refuge System and contribute to that mission by fostering an appreciation for fish and wildlife. The Service has determined that the six wildlife-dependent public uses referenced above are compatible with the purpose of the proposed refuge (Appendix 1-2).

Throughout most of the National Wildlife Refuge System, hunting and fishing are permitted in accordance with state seasons. Units of the Little Darby National Wildlife Refuge may be opened to these uses when they are of a sufficient size, when suitable public access can be provided, when there are no detrimental impacts to any threatened or endangered species, and where these activities can be conducted safely.

The refuge manager may establish time and space zones to regulate these uses to insure they remain compatible with the wildlife and habitat preservation purposes of the National Wildlife Refuge System and to reduce potential conflicts among users.

Certain portions of the units may be closed to hunting, fishing or other public uses when the manager determines that specific habitat or wildlife protection needs are best met by establishing sanctuary areas.

Table 1: General Public Use Regulations

Public entry is permitted year-round in those areas shown in the Refuge leaflet and marked by appropriate signs.

Vehicles are allowed only on roads.

Parking is prohibited in front of closed gates or in a manner that blocks refuge roads or trails.

Use of the refuge for any activity is limited to daylight hours only. Camping or overnight parking is not permitted.

Possessing or discharging firearms is prohibited except during established hunting seasons in areas open to hunting.

Disturbing or collecting any plant or animal is prohibited except under special permit.

No person may search for, disturb, or remove from the refuge any artifact or other historical object.

Directing the rays of any artificial light for the purpose of spotting, locating or taking any animal is prohibited.

Drug and alcohol use is prohibited on the refuge.

Fires are not allowed.

Dogs and other pets must be kept under control at all times.

Physical developments to accommodate public use and enjoyment of the national wildlife refuge will generally be limited to small parking areas and informational and educational signs. Short hiking trails and wildlife observation areas may be developed.

There is strong interest in public use opportunities, and each activity is discussed separately in the following paragraphs. General public use regulations established in the National Wildlife Refuge System Administration Act are shown in Table 1.

Facilities Management

- The Service generally avoids acquiring buildings in refuge acquisition projects. When they are acquired, however, existing buildings are sometimes used for administration and management. If the buildings are not suitable for Service use, they are sold. If the buildings have nominal value they are typically demolished, the debris disposed of, and the site returned to natural conditions. Buildings determined to have historical significance would be preserved or documented according to National Historic Preservation standards.
- Boundaries of any lands acquired would be posted with national wildlife refuge signs at regular intervals.

Access

- State, county, and township roads that traverse a national wildlife refuge remain open to public traffic. Driveways, private roads, and trails would be closed after a tract is acquired. Some areas could be established as sanctuary areas and would be closed to visitors, however portions of the national wildlife refuge may be open for access by foot or other non-motorized means. The needs of people with disabilities would be considered during access planning for refuge activities or facilities. Signs and leaflets would clearly indicate open and closed areas of the refuge.
- The presence of a national wildlife refuge does not create a legal right to cross private lands to access refuge lands. Lands remaining in private ownership within the refuge would retain all rights of private ownership that existed before the establishment of the national wildlife refuge.

Motorized Vehicles

- Motorized vehicles on national wildlife refuges are generally permitted only on designated roads during specified times of the year. Off-road vehicle use, including all-terrain vehicles and snowmobiles, is usually not permitted because of their impacts on vegetation, disturbance to wildlife and other refuge users, and safety and liability concerns. In addition, such use is not deemed wildlife-dependent as described in the National Wildlife Refuge System Improvement Act of 1997, nor does such use have a clear link to wildlife-dependent recreational uses such as wildlife observation, photography, hunting and fishing.

Law Enforcement

- Enforcement of state and Federal laws on national wildlife refuges is important to safeguard resources as well as to protect visitors and manage their use of the refuge. Refuge officers would work closely with state and local law enforcement agencies.

Public Information Management

- Provide information on newsworthy events through news releases, interviews and media contacts.
- Involve the refuge and refuge staff in community affairs by active participation in local activities or programs.
- Provide services to the community-at-large through refuge programs, technical assistance and other cooperative efforts and may provide services such as use of equipment and facilities during significant community emergencies.

Environmental Education and Interpretation

- Design environmental education and interpretive programs to enhance visitors' understanding of natural resource management programs and ecological concepts.

- Assure that educators, particularly natural science teachers, are aware of the facilities that will be available for outdoor education at the proposed refuge.
- Serve as facilitators in teacher workshops and seminars designed to increase educators' knowledge of natural resource issues.
- Establish a Learning Center to enhance educational activities aimed at understanding the Darby Creek ecosystem and agricultural practices.
- Consider the establishment of a teacher advisory group to develop long-term environmental education program direction.
- Establish strategically located visitor facilities where natural resource information can be presented.
- Provide on-site presentations for visitor groups as well as off-site programs and services.
- Provide self-guided resources such as audiovisual aids, self-guided trails, auto tour routes, signs and interpretive publications.
- Work with other agencies and organizations to develop and present cooperative programs.

Wildlife Observation

- The Little Darby National Wildlife Refuge could help meet a growing public interest in wildlife viewing. Trails and wildlife observation sites may be developed.

Hunting Program Management

- Open refuge lands to hunting consistent with the refuge purpose and goals as soon as sufficient land has been acquired and biological data collected to properly manage wildlife populations. Maintain sanctuary area for migratory birds as necessary.
- Prevent conflicts among hunting, general public use of the refuge and adjoining private property owners. This objective can be accomplished either by maintaining sufficient distance between potentially conflicting uses or by adjusting the timing of events.
- Emphasize hunting programs to control wildlife populations, especially white-tailed deer, where populations create a potential hazard to public safety, such as on well traveled roadways.

Sport Fishing Program Management

- Where practical, allow sport fishing within the framework of the Ohio Division of Wildlife's regulations, subject to additional regulation by the Service if needed to:
- Protect sensitive wildlife species within the proposed refuge area
- Assure a quality experience to avoid public use conflicts
- Encourage additional use of the Little Darby Creek fishery resources by providing increased/controlled access.

4. Non-Wildlife

Most units of the National Wildlife Refuge System have other activities occurring on them that have little relationship to the primary purposes for which the areas were established. Most of these uses relate to pre-existing activities such as transportation corridors, utilities rights-of-way or reserved rights on the lands at the time they were purchased. Regardless of how the uses came to be, they must be addressed in terms of the day-to-day management of the refuge. Actively managing these nonconforming uses usually is accomplished through administrative actions by refuge management. The following policy and objective statements address nonconforming activities that are likely to be present in the administration of the proposed Little Darby National Wildlife Refuge.

Rights-of-Way Management

State, county, and townships retain maintenance obligations for roads and their rights-of-way under their jurisdiction within the national wildlife refuge boundaries. Existing rights-of-ways and terms of other easements will continue to be honored. New rights-of-ways and easements will be considered in relation to Refuge System regulations and how the rights-of-way or easement is likely to impact refuge resources and goals.

In addition:

- Refuge management will ensure that there is no occupancy of refuge lands unless a right-of-way has been granted.
- If it is needed, Refuge management will consider developing a package that includes information addressing all environmental compliances.
- If a right-of-way is granted, the refuge manager is responsible for monitoring the construction and operation of the facility to assure that the conditions in the permit are being met to protect refuge resources and the public.

Special Note: Rights-of-way should not be confused with uses of refuge lands through rights that were reserved or outstanding at the time of acquisition. In these cases a special use permit with stipulations to protect refuge values is used to authorize entry onto Service lands. Depending upon the use, an administrative charge may be made for the special use permits; however, surface damages that occur beyond what is ordinary or expected can be assessed to the user.

III. Habitat Development and Management

A. Habitat Focus

1. Wetlands

Management Goal:

To preserve and restore feeding, resting, and reproduction habitat of migratory birds such as waterfowl, shorebirds and wading birds; native fish species; and endangered species. Preserve and restore wetlands to recreate a portion of the natural wetland condition that existed prior to drainage.

Management Techniques and Rationale:

Management of refuge wetlands would involve a variety of management techniques to preserve, restore and enhance wetland habitats for wildlife. Where necessary, active management may play an important role in the establishment and maintenance of wetland vegetation on the refuge. Active management usually involves the manipulation of water to achieve the desired successional stage or zone of wetland plant communities. Plant zones provide structural diversity to refuge wetlands and several plant zones are more beneficial to wildlife than are homogenous stands. Plant assemblages within the wetland attract different species of birds, mammals, reptiles, invertebrates, amphibians and fish. Thus, to attract and maintain diverse populations of wildlife, wetlands may be managed to promote diverse plant communities. A hemi-marsh condition (50 percent emergent vegetation and 50 percent open water) is an ideal composition of emergent vegetation (cattails, bull-rushes, etc.) and open water areas containing submersed vegetation (pondweeds, coontail, etc.).

Drought conditions, both natural and through periodic draw downs, also play an important role in the life cycle of wetlands. As wetland areas dry up and soils harden, nutrients are released and made available. This process results in rejuvenation and, when re-flooded, creates a thriving area with animal life and aquatic vegetation that is essential to wetland wildlife. Most of the existing hydric soil-wetland complexes would be restored by the elimination of artificial subsurface drainage structures. Most of these wetlands would be self-sustaining with little or no active water management or diking required.

Wetlands and wet prairie on lands owned by the Service would be restored with careful consideration given to any potential impacts to adjacent private lands. The Service must ensure that its actions do not interfere with any existing drainage that crosses the Service lands, coming from private lands. Restoration includes a careful elevation survey of any wetland basin to be restored, consideration of the soil types and their water holding potential, and consideration of drainage patterns in the area. The actual restoration work may involve installation of a plug or water control structure on a ditch, removal of tile lines, or replacement of perforated tile with solid tile. All work is done in a manner to ensure that adjacent private property is not negatively impacted. Benefits to adjacent private property include reduced runoff from the Service lands, lower maintenance of the drainage system due to no inflow of sediment from the Service lands, and lower maintenance of tile lines where perforated pipe is replaced by solid pipe.

2. Upland Forests

Management Goal:

To preserve or recreate forest types and distribution that mimics plant composition present prior to settlement. Any existing oak savanna type communities and associated grassland habitat would be preserved and restored. Viable seed would be collected and used to restore areas.

Management Techniques and Rationale:

Existing stands of native mature timber are very rare and should be the high priority for preservation. For stands that have been selectively harvested, appropriate management would depend on the time since logging operations occurred. In recently harvested stands (i.e., 5-10 years), a viable seed bank

should still exist for the tree species removed (e.g., oaks). On such sites, 2- to 10-acre openings could be created and the forest allowed to regenerate naturally. Selected control of undesirable tree species might be required to favor more desirable tree species. Natural regeneration of many of the most desirable tree species would not likely occur from surrounding stands because the species have heavy seeds (like acorns) that are not widely dispersed. Specific planting needs will have to be determined from an understory analysis of each site. In general, oaks could be planted to provide mast for a range of wildlife species, and hickory and elm could be planted for Indiana bats, which roost under the exfoliating bark.

3. Upland Agricultural Areas

Management Goal:

Reforest openings created by logging or agricultural production within the riparian corridor so the project will eventually have large blocks of mature growth forest within the corridor. Restore native mesic grasslands on suitable sites.

Management techniques and rationale:

Seeds and seedlings of upland tree species are readily available and upland reforestation practices are well developed. Machine planting of seedlings could result in 80-85 percent survival. Horizontal and vertical plant diversity would be a goal within a broader reach of the corridor to provide a mosaic of habitat types.

Restored prairie must be available as feeding, resting, and reproduction habitat for song birds, raptors, shorebirds, waterfowl and other trust species. Many plants and animals specifically need a prairie grassland environment to prosper. A particular soil type, host plant or pollinator may be needed for them to reproduce and survive. Grassland management to meet these biological needs will include establishment of native seedlings. Natural diversity would be provided by adding native forbs to the seed mix to approximate original prairie. Reintroduction of some rare or threatened plant species may be done using seed, rootstock or seedlings.

Any existing remnant and degraded prairie/oak savanna can be enhanced and reconnected to other prairie/oak savanna tracts to provide travel corridors, resulting in added numbers and diversity of native fish and wildlife. Restoration of the physical features of prairie habitat in this way, coupled with better fire and grazing management of existing lands within other programs for fish and wildlife, will magnify the benefits that independent efforts would achieve.

Prairie and wet meadow restoration would rely upon local genotypes to the greatest extent possible. Use of local genetic types of native plants ensures that the species will be well adapted to local conditions. Techniques for prairie restoration are widely used and continually evolving and improving. Technical assistance would be available from staff at Neil Smith National Wildlife Refuge in Iowa, where an 8,000-acre prairie restoration effort is under way. There is considerable expertise at other Service field stations in the Midwest where the Service has restored thousands of acres of native grasslands. In general, the restoration of prairie would involve collection of seed, often by hand initially until a large enough seed source is developed. The seed is often drilled into soybean stubble or similar prepared seed bed using specialized grass drills designed to handle the light, fluffy native grass seed and small forb seeds. A diversity of

grass and forb species is necessary for a viable grassland restoration effort. The first year or two following seeding will likely require periodic mowing to prevent weed development and to reduce competition with the native species. Once well established and managed, the prairie forms an effective barrier to most common weeds.

Techniques for maintenance of natural and restored prairie may include grazing, haying, prescribed burning, brush cutting, roller chopping or girdling, and other grassland management tools. Periodic manipulation of prairie grasslands retains plant vigor and retards invasion of woody plants and non-native grass species. Short-term cropland management will be needed to control undesirable plants to prepare lands for native prairie restoration. Local ecotypes of prairie grasses and forbes will be used.

4. Bottomland Forests

Management Goal:

Bottomland forests are largely limited to riparian and floodplain corridors. Management will focus upon protection where bottomland forests are present and restoration where they have been cut over.

Management Techniques and Rationale:

Management activities for bottomland forests are the same as for upland forests. In stands formerly harvested, openings could be allowed to regenerate through natural succession. In older sites, some planting of heavy-seeded trees would be required. Light-seeded species would invade the site naturally. To enhance mast production, pin oak, and swamp white oak could be planted. These oaks produce the relatively small acorns preferred by waterfowl, and the mix of white and red oaks would even out overall mast production despite the year-to-year variation in production by different species.

5. Hydric Agricultural Areas

Management Goal:

Hydric agricultural areas are defined here as those sites currently devoted to crop production and having poorly drained (or hydric) soils. Three basic activities would likely be considered in such areas:

- wet meadow/prairie reestablishment
- moist-soil management
- reforestation

Management Techniques and Rationale:

Wet prairie management would probably be given first priority in deciding what to do at any particular location because of the historical evidence and expanse of this habitat type. Reforestation would be considered only where evidence supports it. Moist-soil management would probably not be considered on areas not currently in agriculture because the additional costs and resource trade-offs involved in removing existing vegetation would not be justified. In a few cases, bottomland agricultural areas could be converted to productive moist soil habitats to provide shallow, flooded food resources (seeds, invertebrates) for migrating waterfowl and other wildlife. The greatest use by ducks occurs in fall, but moist-soil units provide a variety of resources for ducks and many other wildlife species throughout the year. The general management scheme for most units is

to produce native vegetation (e.g., smartweeds, millets, chufa, beggar-ticks) during the growing season and then flood the vegetation in the fall to make the seeds (and invertebrates) available to waterfowl. Units usually remain flooded through the winter and are drawn down in the following spring to provide conditions suitable for germination and growth of native vegetation. In the fall, shallow flooding is desirable both to minimize the amount of water required and to provide optimum foraging conditions for surface feeding ducks, which prefer to feed in shallow water.

See the discussion of prairie restoration techniques under Upland Agricultural Areas for a general view of the restoration process for wet meadow and prairie.

As noted previously, moist-soil management units, if used at all, would be sited only in hydric-low-lying areas currently used for agriculture, and they would be very limited. Use of such areas would eliminate the need for clearing existing vegetation and minimize the difficulty of developing water supply systems (for fall flooding).

Reforestation practices for bottomlands are not well-developed, except in the southeast, and supplies of seeds and seedlings are limited. However, bottomland hardwood reforestation projects and research are being conducted throughout the southeast United States and suitable techniques and plant materials should be more readily available in the future. Another possibility would be the establishment a project nursery. This would provide a reliable source of local seedlings for project lands, as well as for other public lands and private lands in the project area. To avoid invasion and dominance by undesirable woody species, most agricultural fields should continue to be cropped until either reforestation efforts or permanent cover development is ready to begin.

6. In-Stream Habitat

Management Goals:

In-stream flow, corridor structural characteristics, and water chemistry would be monitored and managed collaboratively with state and private organizations to insure a regimen that maintains the highest state of water quality dynamic equilibrium.

Management Techniques and Rationale:

This would be accomplished by focusing on developing and implementing a plan to collect data and monitor in-stream habitat and water quality. System sustainability will be achieved by restoring corridor habitat, enhancing filtering and barrier functions, improving habitat connectivity, and protecting influent groundwater. The Service cannot independently protect all aquatic resources in the project area, so these activities are principally limited to waters within designated fee simple acquisition areas. Nevertheless, minimal habitat protection measures are recommended throughout the larger farmland preservation area with the cooperation of private landowners.

When log jams hamper drainage on adjoining property, the debris will be removed.

Stream restoration activities may include embankment revegetation and fishery/aquatic habitat improvements.

IV. Private Habitat Restoration and Preservation

Mechanisms

The following mechanisms are adjunct to the Service's proposal and available to all qualified land users in the overall project boundary.

1. Federal Mechanisms

Wetland Reserve Program (WRP)

U.S. Department of Agriculture (USDA). The 1996 reauthorization of the Farm Bill reestablished a Wetlands Reserve Program that provides financial incentives for restoration and protection of up to 975,000 acres through long-term agreements. Easements are for 30 years or longer, depending on the maximum amount of time allowed by state law, and provide landowners with 75 percent to 100 percent cost-sharing for permanent easements; 50 percent to 75 percent for 30 year easements; and 50 to 75 percent for restoration cost-sharing agreements.

Conservation Reserve Program (CRP)

U.S. Department of Agriculture (USDA). Pursuant to the Conservation Title of the Food Security Act of 1985 (Farm Bill) and expanded in the 1996 version of that bill, the program sponsors activities designed to protect soil and water quality through direct payments to farmers for retiring eligible cropland and environmentally sensitive lands for a period of 10 years. Natural resource benefits from the CRP include reduced erosion, improved water quality, and soil productivity benefits. According to Ribaud et al. 1989, water quality benefits from CRP lands are seven times that of traditional soil conservation programs and are estimated at \$79 per acre. Soil productivity benefits are estimated at \$36 per acre. The program encourages protection of highly erodible uplands and filter strips along wetlands, which can reduce pesticide and sediment runoff into wetlands.

Environmental Quality Incentives

U.S. Department of Agriculture (USDA). This program combines the functions of the Agricultural Conservation Program, the Water Quality Incentives Program, the Great Plains Conservation Program, and the Colorado River Basin Salinity Control Program. EQIP is funded at \$130 million in Fiscal Year 1996 and \$200 million annually thereafter. Livestock-related conservation practices will receive 50 percent of program funding. The program provides cost-sharing to farmers of up to 75 percent of the cost of conservation practices. There is a maximum payment to any one person of \$10,000 annually, and to \$50,000 for the life of the contract. These cost-shared practices include a variety of tools designed to encourage the establishment of long lasting conservation practices that will conserve soil, water, forest and wildlife resources.

Farmers Home Administration (FmHA) Wetland-Related Programs

U.S. Department of Agriculture, Farmers Home Administration. Building on an earlier program prompted by Executive Order. 11990, the 1990 Farm Bill requires the USDA to establish perpetual conservation easements on wetlands in the FmHA inventory of foreclosed farmland. The act also allows for cancellation of debt in exchange for conservation easements on wetlands.

Set-aside Programs

Farmers participating in Federal price support programs have been required to set aside a certain percentage of their base acreage in most years. Conservation measures are required to provide soil erosion protection, water quality enhancement, wildlife production and natural beauty. Millions of acres of cropland are retired each year as a result of this program, benefitting numerous species of wildlife.

Partners for Fish and Wildlife Program

U.S. Department of Interior, Fish and Wildlife Service. Drawing from several legal authorities, the Service has focused considerable effort for the past 12 years on encouraging and assisting private landowners to restore converted and degraded wetlands and associated upland habitats. The Service provides technical assistance and cost-sharing to complete the work if the landowner agrees to maintain the area for a period of 20 years or longer.

2. State and Local Mechanisms

The Ohio Division of Wildlife restores and preserves land for fish and wildlife through their wetland and upland restoration programs on private land. These programs are mostly cost share - incentive based and similar to the Service's Partners for Fish and Wildlife program.

The Ohio Division of Soil and Water administers the Nature Works program, which is a cost share grant program to protect and restore riparian corridors. It can function in cooperation with the federal Wetland Reserve Program.

The State of Ohio also offers incentive programs designed to give private landowners tax relief for implementing conservation practices on their land. Practices designed to reduce erosion and improve water quality qualify for incentive programs, and expenses related to the restoration of wetlands for water quality and wildlife purposes are typically tax deductible.

Soil and Water Conservation Districts will continue to have a major responsibility for providing direction, technical assistance and application of conservation practices on private land within the watershed.

County and township authorities will continue to be responsible for insuring that nonconforming uses are minimized as much as possible in the overall project area. The counties and townships have a pivotal role in supporting the maintenance of the rural character of the Darby Creek Watershed and insuring that complementary and novel conservation practices are instituted within the framework of any new development.

3. Private Mechanisms

In recent years, private conservation organizations have been effective in promoting wildlife habitat improvement on private lands. Several of these organizations are national or international in scope, while others are regional or local. Collectively, these organizations are a great source of financial and technical assistance for the private landowner who wishes to improve lands for wildlife. Some of the more popular organizations include:

- The Nature Conservancy
- Natural Heritage Foundations
- The Conservation Fund
- Fish and Wildlife Foundation
- Izaak Walton League
- Audubon Society
- American Land Conservancy
- American Farmland Trust
- Trust for Public Lands
- Ducks Unlimited
- Waterfowl USA
- Sierra Club
- National Wildlife Federation
- Wildlife Forever
- Pheasants Forever

In addition, local hunting, fishing, and conservation organizations are often willing to assist private landowners with wildlife habitat improvement projects. Many of these organizations have substantial financial and technical resources and are often a dedicated source of energy for wildlife habitat improvement on both private and public lands.

V. Refuge Administration

The proposed refuge would be part of the U.S. Fish and Wildlife Service's National Wildlife Refuge System. The Great Lakes/Big Rivers Regional Office, located at Ft. Snelling, Minnesota, in the Minneapolis metropolitan area, would provide oversight of Refuge administration and management. The Regional Office would also provide technical assistance on engineering, public use planning, endangered and threatened species, and migratory bird management.

The refuge would be a nontraditional type of national wildlife refuge incorporating multiple levels of involvement, protection, and preservation techniques. Emphasis would be on permanent restoration/protection of the wetland, prairie/oak savanna and aquatic habitat resources through a variety of means. The first choice is working with private landowners and partnerships to ensure permanent protection. Some landowners may not be interested in commitments to permanent protection but may be willing to manage their land in a way that preserves/restores the plants and animals found there as well as riparian habitats. Other landowners may prefer to sell land within the designated fee acquisition area to ensure permanent protection. Fee title acquisition will be the priority consideration in the designated area of approximately 20,000 acres. The larger farmland preservation area will be considered for less than fee acquisition mechanisms by the Service. State, other Federal, nonprofit, and landowner cooperation will be a vital part of the protection strategy.

Field administration of the refuge could occur from more than one location with oversight from a single field location near the Village of Plumwood or West Jefferson. There are other potential locations and possible ways to administer the refuge, including administration of the area that may involve cooperative arrangements.

Administration of refuge lands other than by the U.S. Fish and Wildlife Service would occur through cooperative agreement or other cooperative arrangement to ensure compliance with National Wildlife Refuge System laws, policy, and regulations. The ultimate method of administration may depend upon the distribution of lands throughout the Basin for which the Service would have administrative responsibilities.

1. Work Force

The proposed refuge would likely have a permanent, full-time staff of six to 11 people, including:

Project Leader (Refuge Manager)
Assistant Manager
Biologist
Administrative Technician
Two Biological Technicians
Three Maintenance positions
One Park Ranger
Outdoor Recreation Planner

Temporary employees during the field season could include biological aides and high school youth through the Youth Conservation Corps. In addition to technical expertise, refuge staff are selected on the basis of their abilities to work effectively with the public and neighboring landowners. A Refuge Manager would be the first person to “staff” the Refuge, with additional persons added when and if acquisition proceeds. Volunteers are a valuable asset at many refuges and would be welcomed if this refuge were established.

2. Annual Budget

The annual budget for the refuge is estimated to be approximately \$800,000 to \$1,000,000 to cover salaries, equipment maintenance, supplies, and routine equipment and construction material purchases. Large construction projects such as an office/visitor contact facility, shop facilities, wetland restoration, prairie restoration and some roads could be substantial over the 30-year refuge development period.

3. Facilities

The need for refuge facilities will be determined through future planning and will be developed depending upon funding availability, staffing, and the distribution of lands for which the Service has management responsibility. Buildings on land acquired for national wildlife refuges are occasionally used for administration and management. If the buildings are not suitable for Service use, they are generally sold to the public. If the buildings have nominal value they will probably be demolished and the site returned to natural conditions. Buildings determined to have historical significance will be preserved or documented according to National Historic Preservation standards. Boundaries of lands acquired would be posted with national wildlife refuge signs at prescribed intervals. Suitable fencing or other types of barriers are often constructed to exclude or manage livestock. Refuge offices are generally open from 8 a.m. - 4:30 Monday through Friday. Established public use facilities are often managed to accommodate public needs and interests, and refuge programs.

4. Monitoring of Wildlife, Habitat and Public Use

Since the primary purpose for developing a new national wildlife refuge is wildlife, surveys are conducted annually to track population trends. This information is the basis for habitat management decisions. Surveys could include:

- waterfowl surveys
- nesting surveys to determine densities and success
- habitat management surveys
- breeding bird surveys
- big game surveys
- aquatic habitat/population assessments
- banding and marking

Many surveys would be done in cooperation with state DNRs to tie into existing data bases. In addition, college, university or other agency research would be encouraged to gain more information on both plant and wildlife species.

Public use would also be monitored to periodically assess the public's reaction to and use of refuge programs. Impacts of public use on the natural resources would be monitored to ensure that there is no negative impact on the wildlife resources and the habitat.

5. Public Use

Wildlife-dependent public use is generally encouraged on national wildlife refuges as long as it is compatible with the primary resource purposes of the refuge. Priority wildlife-dependent public uses are defined by the Service as hunting, fishing, wildlife observation and photography, environmental education and interpretation. Public use opportunities at the Little Darby National Wildlife Refuge would be varied and may include both consumptive (hunting, fishing, etc.) and non-consumptive uses (photography, birdwatching, auto touring, etc.). Because of the interest in public use opportunities, major activities are discussed as follows.

6. Access

State, county, and township roads that traverse the refuge will remain open to public traffic in accordance with established state, county and township easements. If a public roadway is no longer needed for public use, the township, county or state can abandon and close the road; the Service cannot unilaterally close roads. Some areas on refuges are sanctuary areas and are closed to visitors. However, some parts of a refuge are usually open for access by foot, skis, canoe, or other non-motorized means. The needs of physically challenged persons would be considered during access planning for any refuge activity or facility. Signs and leaflets would clearly indicate the open and closed areas of the Refuge.

A small user-fee is required to enter and use some national wildlife refuges. It is not anticipated that any fee system would be used at the proposed Little Darby National Wildlife Refuge.

7. Hunting and Trapping

Opening the refuge to the hunting of waterfowl, small game, and white-tailed deer would be evaluated. If deemed appropriate, these activities would be permitted in accordance with all regulations and licensing requirements. Areas open would depend on the outcome of management planning done with public input. On most refuges open to waterfowl hunting, sanctuary areas are established to provide undisturbed resting areas during the fall migration. It is the intent of the Service to keep refuge lands open to waterfowl hunting consistent with the refuge purpose and goals.

Furbearer trapping may be permitted, although regulations are often more restrictive than state regulations. Generally, trapping is limited to a few individuals who are selected on the basis of a bid system or random drawing. Trapping programs are usually based on a specific management purpose, such as controlling beaver populations.

8. Fishing

Once an evaluation of the resource has been completed, fishing may be permitted on refuge lands in accordance with state regulations and license requirements. The trapping/netting of bait species would not be allowed. Collecting or trapping programs will always have a specific management purpose.

9. Hiking, Cross-Country Skiing and Other Uses

Motor vehicles would not be permitted off-road. Use of all-terrain vehicles and snowmobiles would not be allowed on Refuge lands.

Many wildlife-oriented and wildlands-oriented activities would be encouraged, including hiking, photography, cross-country skiing, and birdwatching. A self-guided auto tour covering several miles may be established if it is deemed both compatible with the refuge purpose and practicable.

10. Environmental Education and Interpretation

Environmental education and interpretive programs would be designed to enhance visitors' understanding of natural resource management programs, agricultural land uses, and ecological concepts. The refuge would serve as an important "outdoor classroom" for area school districts. Teacher workshops would be offered to enhance ongoing environmental education programs. Visitor facilities would be planned with the needs of students and teachers in mind. Interpretive programs would focus on self-guided facilities such as auto tour routes, signed trails, leaflets, and interpretive signs along interesting features. If a visitor center is built, it would likely contain an auditorium for multi-media presentations, exhibits, a classroom/meeting room, and a bookstore offering natural resource information to the public. The refuge environmental education program would seek local input to ensure that it was meeting local needs as well as the Service mission.

11. Law Enforcement

Enforcement of state and Federal laws on national wildlife refuges is important to safeguard resources and protect visitors. Two or more refuge staff people usually have law enforcement training and authority. Refuge officers would work closely with state Division of Wildlife conservation officers, county sheriff's departments, the State Highway Patrol, township police, and local fire and rescue authorities. Service special agents are also available to assist with refuge law enforcement issues as necessary.

12. Refuge Revenue Sharing

If the Service acquires land (acquisition will be from willing sellers only), the counties in which these lands are located will receive annual refuge revenue sharing payments in lieu of tax payments. The Refuge Revenue Sharing Act of June 15, 1935, as amended, provides for annual payments to counties or the lowest unit of government that collects and distributes taxes based on acreage and value of national wildlife refuge lands located within the county. The monies for these payments come from two sources:

Net receipts from the sale of products from National Wildlife Refuge System lands (oil and gas leases, timber sales grazing fees, etc.), and

Annual Congressional appropriations. Annual Congressional appropriations, as authorized by a 1978 amendment, were intended to make up the difference between the net receipts from the Refuge Revenue Sharing Fund and the total amount due to local units of government.

Payments to the counties are calculated based on whichever of the following formulas as set out in the Act provides the largest return:

- \$.75 per acre;
- 25 percent of the net receipts collected from refuge lands in the county;
- Three-quarters of 1 percent of the appraised value. In the State of Ohio, three-quarters of 1 percent of the appraised value always brings the greatest return to the taxing bodies. Using this method, lands are re-appraised every 5 years to reflect current market values based on the highest and best use.

13. Miscellaneous

Fire Management

It is the policy of the Service to use fire when it is the most appropriate management tool for reaching habitat objectives. For example, a prescribed fire in a bog can create open water areas and remove encroaching shrub habitat that sandhill cranes avoid when nesting. Wildfires, however, would be aggressively suppressed.

Fire is also a management tool regularly used to manage native prairie. The proposed Refuge expects to utilize prescribed fire as a tool to improve the vigor of established prairie grasses and maintain designated areas of early successional vegetation. The Service's fire management activity generally includes cooperative agreements with local fire districts and resource agencies with provisions for the mutually beneficial sharing of funding, equipment and personnel.

All Service personnel that engage in this activity are highly trained, well equipped, and understand conditions necessary to conduct this activity safely. Prescribed fire is used on a multi-year rotation basis and management units, once well established, are not treated in successive years. In addition to the use of fire, the Service may also use grazing, haying and mowing to manage restored prairie areas. In all cases, adjacent residents will be informed of Service activities prior to any controlled burns. The use of prescribed fire will only be conducted once a fire management plan has been completed and approved.

Crop Depredation and Other Pest Control

The Refuge staff, in cooperation with the state, would provide technical advice to landowners surrounding the refuge if crop losses occur from migratory birds, deer or other wildlife. The U.S. Department of Agriculture has an Animal Damage Control Division that can provide more direct assistance. Beaver activities that threaten public roads on the refuge would generally be handled directly by the refuge staff in coordination with state DNRs.

Service policy is to control weeds that the State has listed as noxious. This control would emphasize an integrated pest management approach and would be directed to keeping noxious weeds from spreading to adjacent private farmland. Once well established, native prairie restorations have little if any weed problems.

Mosquito Control

Policy

The policy of Region 3, U.S. Fish and Wildlife Service is to prohibit treatment of refuge lands for mosquitoes except in the case of an emergency when there is a real and imminent threat to human health. If established, the Little Darby National Wildlife Refuge would cooperate with local officials in the monitoring of mosquito populations on refuge lands and in the removal of tires or other debris that serve as artificial breeding sites.

Determination of Human Health Emergency

For purposes of treatment of refuge lands for disease-carrying mosquitoes, a human health emergency will be determined by the Regional Director of the U.S. Fish and Wildlife Service in consultation with the U.S. Center for Disease Control, the Ohio Department of Health and other recognized health care professionals.

Responsibility for Prescription of Treatment of Refuge Lands

Once the Regional Director has determined the existence of a human health emergency, he or she will prescribe, in consultation with recognized biologists and entomologists, the type and duration of treatment for mosquitoes on refuge lands.

Implementation of the Policy

Prior to the mosquito season, the refuge manager will identify biologists and entomologists that have expertise in mosquitoes and agree to consult with the refuge during possible human health emergencies. We anticipate that these experts will come from universities and state government agencies within Ohio.

Drainage

The public has expressed concern that drainage from privateland may be negatively impacted on Service-owned lands.

Service policy is to not adversely affect drainage or surface hydrology on adjacent private lands. Restoration of wetlands with their natural contaminant filtration properties and protection of riparian areas would contribute to improved groundwater quality. Through wetland restoration on Service lands and the resulting detention of water, drainage needs could actually be reduced on some adjacent private lands due to reduced overland flow to the property. The Service will institute a drainage advisory board to insure that all possible adverse impacts are considered before any restoration is implemented.

Potential representation may be from the NRCS, local producers, ODNR, and Ohio State University Extension. The size, makeup and detailed function will be determined if a refuge is established.

Appendix I-1

Draft Memorandum of Understanding

The following is a draft example of a Memorandum of Understanding that could facilitate regular discussion and cooperation between the U.S. Fish & Wildlife Service and the Township Governments included in a portion of the Proposed Little Darby National Wildlife Refuge.

**MEMORANDUM OF UNDERSTANDING
LITTLE DARBY NATIONAL WILDLIFE REFUGE**

MEMORANDUM OF UNDERSTANDING dated this _____ d a y of _____, 2000, among the U.S. Fish & Wildlife Service ("USFWS") and the Townships of _____, _____, _____, _____, _____, and _____ located in Madison, County, Ohio and the Townships of _____ and _____ located in Union County, Ohio (collectively the "Town")

RECITALS

WHEREAS, decisions governing the Little Darby National Wildlife Refuge ("Refuge") have a direct and broadly-based effect on the interrelated heritage of cultural, environmental and economic stability of the residents of the Towns, and

WHEREAS, Congress has expressly intended to act in cooperation with local governments while using all practicable means to create and maintain conditions on federal lands allowing for productive harmony between man and nature; and

WHEREAS, the USFWS and the Towns wish to enhance the level of cooperation over USFWS programs relating to the Refuge including, without limitation, programs for the acquisition of additional land by the USFWS for the Refuge; and

WHEREAS, the parties agree that there exists a benefit for the involvement of the Towns in the USFWS decision-making process; and

WHEREAS, the parties desire to openly communicate and therefore provide a conduit for the free exchange of information on common issues and problems; and

WHEREAS, the parties desire to provide a framework for the consideration of the social, economic and cultural effects of public land acquisition and resource management decisions as part of the overall planning and decision-making processes;

NOW, THEREFORE, the parties agree therefore to work in good faith as follows.

ARTICLE I

COOPERATIVE PLANNING

1.1 Notice of USFWS Action. The USFWS will give timely written notice on major and relevant policy and management changes to the Townships prior to notifying the general public in compliance with the National Environmental Policy Act (NEPA). The USFWS will provide to the Towns copies of policy and plans, that might be pertinent to the Towns and solicit their review and comment. The Towns' response will include suggested issues, alternatives, or mitigation measures and their desired participation in planned activities. The Towns may

request a meeting with the USFWS to discuss the above items relative to USFWS action. The Towns will, to the greatest extent possible, organize and conduct these meetings to keep focused on specific issues and project at hand and either party may call in special expertise as an aid to decision-making. The USFWS will consider any comments received from the Towns, or input during meetings, prior to final decision-making.

1.2 Notice Of Town Action. The Towns will give timely written notice of proposed zoning ordinances to be considered by the Towns that may be relevant to the management of the Refuge. The Towns will consider the comments of the Refuge manager prior to the adoption of a zoning ordinance relevant to the management of the Refuge. The Towns shall provide the Refuge Manager with copies of any zoning ordinances, policies, or procedures that, might be pertinent to the Refuge at the time they are approved by the respective Town.

ARTICLE 11 LAND ACQUISITION

2.1 No Condemnation. The Towns acknowledge that the USFWS has initiated various projects for the acquisition and restoration of wetlands in the watershed of Little Darby Creek. The USFWS agrees that it will consider all options that will preserve or restore habitats within the project boundaries of Little Darby National Wildlife Refuge including but not restricted to acquisition of fee title interest in lands. If fee title acquisition is required the USFWS will give full consideration to extended use reservations, entering into exchanges, or other alternatives that lessen the effect on the owner, tenants, or other interests in the Towns. Notwithstanding anything to the contrary, the USFWS agrees that no fee title interest in land relating to the Refuge will be acquired through condemnation. All land acquisitions will be from willing sellers only.

2.2 Prior Notice The Refuge Manager shall provide notice to the respective Town Chairman prior to fee title acquisition of lands within the project boundaries. This notice will include a general legal description of the property, current taxes, estimated revenue sharing payment, and a description of any buildings to be acquired and the rationale for their acquisition.

2.3 Reservation of Rights. Land owners adjacent to lands acquired by the USFWS retain all the rights, privileges, and responsibilities of private land ownership, including the right of access, control of trespass, and the right- to sell.

ARTICLE III REGULAR AND SPECIAL MEETINGS

The parties agree that regular and, if necessary, Special meetings will further the goals of this MOU. Therefore, the Refuge Manager and the elected officials of the Towns agree to meet annually, between March 1 and May 1 of each calendar year. The preceding is not intended to preclude more frequent meetings as needed. The purpose of the annual meeting is to discuss matters relevant to the management of the Refuge, including, without limitation, current or planned Refuge projects, Town legislation relevant to the Refuge, necessary amendments to this MOU, and any other matter directly or indirectly relevant to the Refuge. The Refuge Manager shall contact the Towns', Representative to arrange the time and place for the annual meeting. Unless otherwise agreed, the annual,

meeting shall take place at the Town Hall of one of the Towns signing this agreement. The Towns are responsible for compliance with the Ohio open meeting law. The USFWS will be represented at the annual meeting by the Refuge Manager, and any other USFWS Representative deemed necessary to provide information concerning the management of the Refuge or the administration, of projects affecting the Refuge.

ARTICLE IV CONFLICT RESOLUTION

In the event of a disagreement over the implementation or interpretation of this MOU, either party may request a meeting with authorized representatives of the other party to attempt to resolve the dispute. The parties will have the opportunity to present their concerns and will strive to reach a consensus. Neither party will invoke its right to terminate this MOU until it has made a good faith effort to mediate the disagreement.

ARTICLE V GENERAL PROVISIONS

5.1 Termination. This MOU is subject to being terminated by either party upon 6 months written notification of such intent. The notification must be made by certified mail, return receipt requested, to the Refuge Manager or to the Towns' representative, as appropriate.

5.2 Reservation of Rights. Nothing contained in this MOU is intended to constitute a waiver of statutory or administrative legal rights vested in the parties. Unless otherwise agreed, all rights are reserved.

5.3 Severability. If a court of competent jurisdiction determines that any provision of this MOU is unenforceable, or illegal, the parties agree that the balance of this MOU will remain in full force and effect. The parties mutually acknowledge that a court of competent jurisdiction has the power to revise, this MOU without the offending Clause in order to fulfill its intent.

5.4 Amendments. This MOU may not be amended except in writing signed by the authorized representative of each party. Supplements or amendments to this MOU may be proposed by either party and will become effective upon approval by the parties.

5.5 Nondiscrimination. There shall be no discrimination against any person because of race, religion, color, sex, age, or national origin in the implementation of this MOU.

5.6 Appropriations. Nothing in this MOU shall be construed as obligating the parties in the expenditures of funds or for the future payment of money in excess of appropriations authorized by law.

5.7 Authorization. The undersigned represent that he or she has authorization to sign this MOU on behalf of his or her designated entity and that this MOU is enforceable according to its terms.

UNITED STATES DEPARTMENT OF THE INTERIOR
FISH & WILDLIFE SERVICE

By

Authorized Representative

There follows nine separate signature pages for the Towns of _____, _____,
_____, _____, _____, _____, and _____, respectively.

Town of _____

By: Attest:
 Town Chairperson

Town Clerk

Town of _____

By: Attest:
 Town Chairperson

Town Clerk

Town of _____

By: Attest:
 Town Chairperson

Town Clerk

Town of _____

By: Attest:
 Town Chairperson

Town Clerk

Interim Compatibility Determination

Introduction

In accordance with Executive Order 12996, the Service is required to “identify prior to acquisition, existing compatible wildlife-dependent uses of new refuge lands that shall be permitted to continue on an interim basis pending completion of comprehensive planning.” Wildlife-dependent compatible uses are defined as hunting, fishing, environmental education, environmental interpretation, photography, and wildlife observation. The Executive Order directs the Service to “provide expanded opportunities for these priority public uses within the Refuge System when they are compatible and consistent with sound principles of fish and wildlife management, and are otherwise in the public interest.” The intent of the Interim Compatibility Determination is to evaluate the compatibility of the priority uses prior to land acquisition and to inform the public of the interim determination. Once a refuge is established, a Comprehensive Conservation Plan will be developed with significant opportunities for public involvement in the development of the plan. As part of that planning process, compatibility of existing or proposed activities on the refuge are reviewed and decisions documented.

I. STATION NAME: Little Darby National Wildlife Refuge

II. DATE ESTABLISHED: This is a proposed new National Wildlife Refuge

III. ESTABLISHING AUTHORITY Fish and Wildlife Act of 1956

IV. REFUGE SYSTEM MISSION: The Mission is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.

V. PURPOSE FOR WHICH ESTABLISHED: The purpose of the refuge would be for the development, advancement, management, conservation and protection of fish and wildlife resources.

VI. DESCRIPTION OF USE: (1) document the type, level, and location of owner authorized wildlife-dependent recreational activities (wildlife observation and photography, hunting, fishing, environmental education and interpretation) presently occurring on lands proposed for Service acquisition and (2) describe uses being considered. The description should include the following: what is the use; where will it be conducted (include map if helpful), when will it be conducted, and for how long; how will it be conducted; and why will it be conducted on refuge system lands?)

The current use for hunting and fishing opportunities is not known specifically but is assumed to be moderately high due to the proximity of the Columbus, Ohio metropolitan area. Existing use for wildlife observation, wildlife photography, environmental education, and interpretation is likewise unknown but low levels of use are likely to occur.

Sport fishing is a primary activity that presently occurs throughout the Darby Creek watershed and principally within the Little Darby Creek and Big Darby Creek. The smallmouth bass fishery within the Little Darby Creek attracts visitors from throughout the Columbus, OH metropolitan area. According to the 1996 National Survey of Hunting and Fishing, 36 percent of all people who participate in freshwater fishing live within metropolitan statistical areas (MSA) with a population greater than 1 million. Of all persons reported as engaging in fishing, 59 percent are classified

as urban residents. Of all respondents to the survey that hunt, 24 percent are listed as coming from a MSA with a population of 1 million residents or more and 46 percent are classified as urban residents. Almost 50 percent of all people that participate in nonresidential wildlife watching activities live within a MSA of 1 million or more people and 65 percent of all persons engaging in these activities reside in urban areas. The proposed refuge is within a MSA that has a populations size of more than 1 million residents.

Public fishing opportunities will be available through most of the proposed refuge via fishing access points. Some control may be necessary to minimize potential conflict between fishermen and stream related nonconsumptive uses such as canoeing. Most hunting activity would likely be focused in the central and southern part of the proposed fee acquisition area due to the larger sizes of those areas. White-tailed deer populations, local highway safety, and crop depredation, and availability of access considerations will determine the extent to which areas will be opened for big game hunting. Consultation with the Ohio Division of Wildlife and local communities will be important before implementation of any hunting or fishing regulations. Wildlife observation, environmental education and interpretation public uses will generally be managed as site specific activities. An array of public use facilities such as a tour route and visitor/environmental educational facility will be evaluated during refuge planning and within the constraints of lands acquired in fee simple.

VII. ESTIMATE DEMAND FOR PRE-EXISTING WILDLIFE-DEPENDENT RECREATIONAL USE PLUS OTHER WILDLIFE-DEPENDENT RECREATIONAL USES CONSIDERED IF LANDS BECOME REFUGE DOMAIN:

The actual current demand for hunting and fishing opportunities is not known but is assumed to be moderately high due to the proximity of the Columbus, Ohio metropolitan area. Existing use for wildlife observation, wildlife photography, environmental education, and interpretation is likewise unknown but low levels of use are likely to occur. If Little Darby NWR is established demand for big game hunting, fishing, wildlife observation, wildlife photography, interpretation and environmental education programs is anticipated to be high, again due to the proximity to the Columbus area.

VIII. POTENTIAL IMPACTS OF PROPOSED USE/EXISTING USE ON REFUGE PURPOSE:

(Extent the use is consistent with sound fish and wildlife management principles, in the public interest, and direct, indirect, and cumulative impacts on the refuge purpose):

Wildlife dependent public uses can be controlled to minimize conflicts between users and resources by establishing access points on refuge lands, providing adequate signing and visitor information, and by providing an appropriate level of law enforcement activity. Conflicts with and impacts upon the primary purpose of the refuge will be minimal if public use planning is sensitive to these considerations as well as in conformance with the capabilities of the available lands acquired in fee. Many of the grassland dependant birds will have already migrated by the time hunting seasons arrive, minimizing conflicts with that resource.

IX. STIPULATIONS THAT WOULD MAKE PROPOSED USE/EXISTING USE COMPATIBLE WITH REFUGE PURPOSE:

Any proposed hunting and fishing activities will be in accordance with approved hunting and fishing plans that undergo public/community input. Whether specific tracts of land are opened as they are acquired will depend upon whether suitable public access to the property can be provided, whether the tract is large enough to allow hunting safely, and whether there are any use

reservations on the property that would be impacted by hunting. Only lands acquired in fee title would be open to any public uses.

X. JUSTIFICATION (Explain why proposed use/existing use is or is not compatible with refuge purpose(s). This justification must be biologically based):

The aforementioned uses are deemed to be compatible with the proposed refuge within the framework of approved plans.

XI. FUNDING OR STAFFING CONSTRAINTS TO IMPLEMENTATION (availability of Service funding/staffing or other funding or cooperative assistance from the affected State, tribal, local, or private partners to provide appropriate oversight during the interim period (type and level of funding and staffing needed to administer use)):

Available from the Service? Yes No

Discussion:

Since this is a new refuge proposal, there is no way to determine if staffing will be adequate to develop or implement public use plans at this time. We are assuming that as funding is provided to acquire lands, staffing would also occur, allowing implementation of a public use program.

If no, is it available from Service partners? Yes No

Discussion:

The state of Ohio, Division of Wildlife (ODOW), does manage specific hunting programs for the Service at the Ottawa NWR. We would assume that this alternative could be available upon discussion with the ODOW. Also, this proposed refuge is anticipated to have widespread volunteer interest. The approved public uses will receive support from the volunteer program.

XII. DETERMINATION IF USE IS OR IS NOT COMPATIBLE WITH THE PURPOSE(S) FOR WHICH THE REFUGE WAS OR WILL BE ESTABLISHED:

(circle one) IS IS NOT

XIII. WILL THE USE BE ALLOWED AFTER ACQUISITION: YES NO

(circle one)

Discussion (Include any conditions under which the use(s) would be allowed and any explanation of why the use(s) would not be allowed):

Public use plans such as a hunting and fishing plans must be prepared and approved prior to permitting any use of acquired lands.

/s/ Rollin Siegfried 3/29/00
Determined By (Refuge Supervisor): Date

/s/ John Christian 3/29/00
Concurrence By (Geographic ARD): Date